



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960

March 5, 2010

Mr. Mickey Sugg
Project Manager
Wilmington Regulatory Field Office
U.S. Army COE of Engineers
Post Office Box 1890
Wilmington, North Carolina 28402-1890

Subject: Comments on the Final Environmental Impact Statement (FEIS) for the Relocation of New River Inlet Ebb Tide Channel Between North Topsail Beach and Onslow Beach, and the Placement of the Dredged Material Along the Ocean Shoreline of North Topsail Beach in Onslow County, NC; CEQ Number: 20100025; ERP Number: COE-E30043-NC

Dear Mr. Sugg:

Pursuant to Section 309 of the Clean Air Act (CAA) and Section 102(2)(C) of the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) Region 4 has reviewed the "Final Environmental Impact Statement (FEIS) for the Relocation of New River Inlet Ebb Tide Channel Between North Topsail Beach and Onslow Beach, and the Placement of the Dredged Material Along the Ocean Shoreline of North Topsail Beach in Onslow County, NC," which EPA received on February 11, 2010. The FEIS report was issued by the Wilmington District of the United States Army Corps of Engineers (COE), and was intended to comply with the National Environmental Policy Act (NEPA). EPA previously commented by letter dated February 11, 2008 to Colonel Pulliam, Commander of the Wilmington District, on the Draft Environmental Impact Statement (DEIS) for this project. The public commenting period on the FEIS will reportedly end on March 1, 2010.

EPA understands that this FEIS was developed in conjunction with the Town of North Topsail Beach's request for Department of the Army authorization, pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbor Act, to "protect residential homes and town infrastructures by nourishing approximately 11.1 miles of beachfront via repositioning the New River Inlet channel, implementing an inlet management plan to control the positioning of the new inlet channel, and utilizing an offshore borrow area." The new channel will be centrally located and the proposal will be to maintain that position, which "essentially will be located perpendicular to the adjacent shorelines of North Topsail Beach and Onslow Beach." The proposed sources of the material for the beach nourishment will come from the repositioning of the inlet and an identified offshore borrow area. The projected amount of material needed to initially nourish the oceanfront shoreline is approximately 3.11 million cubic yards. The placement of beach fill along the Town's shoreline would result in the initial widening of

the beach by 50 to 100 feet. The widened beach is to be maintained through a program of periodic beach nourishment events with the material extracted from the maintenance of the newly relocated channel. All work will reportedly be accomplished using a hydraulic cutterhead dredge. The proposed project construction will be conducted "in a five phase approach to correspond with the Town's anticipated annual generation of funds."

The ocean shoreline of the Town of North Topsail Beach measures approximately 11.1 miles along the northern end of Topsail Island, with approximately 7.25 miles of the shoreline contained within the project area except for two small areas located within the Coastal Barrier Resource System (CBRS). Those areas within the CBRS are banned by law from receiving federal funds for use on projects that would encourage development. The channel through New River Inlet has been maintained by the COE for commercial and recreational boating interest for over 55 years, and the COE is authorized by law to maintain the navigation channel in the inlet "to a depth of 6 feet mean low water (mlw) over a width of 90 feet, following the channel thalweg."

The Town of North Topsail Beach has proposed to fund the nourishment of the oceanfront shoreline and reposition New River Inlet channel as a means "to address a severe erosion problem in order to preserve the Town's tax base, protect its infrastructure, and maintain its tourist oriented economy." EPA notes that the entire stretch of the Town's shoreline has experienced a considerable amount of erosion over the last 20 years due primarily to the impact of numerous tropical storms and hurricanes during the mid to late 1990's and due to impacts of the shifting of the main ebb channel in New River Inlet. The Town believes that the shoreline erosion and residual effects of the storms have left North Topsail Beach in "an extremely vulnerable position with regard to its ocean front development and infrastructure," and the community has estimated that "over \$250 million in property tax value as well as roads, water and sewer lines, and other utilities are at risk."

EPA notes that the FEIS' stated purpose and need for this project includes eight (8) elements:

- (1) Long-term stabilization of the oceanfront shoreline located immediately south of New River Inlet;
- (2) Providing short-term protection to 31 imminently threatened residential structures over the next five years;
- (3) Providing long-term protection to the Town's infrastructure and approximately 1,200 homes;
- (4) Reducing or mitigating for property damage associated with shoreline erosion along 11.1 miles of oceanfront shoreline of North Topsail Beach;
- (5) Improving recreational opportunities along the Town's oceanfront shoreline;
- (6) Ensuring all material utilized for shore protection is beach compatible;
- (7) Maintaining the Town's tax base by protecting existing development and infrastructure on the oceanfront shoreline of North Topsail Beach;
- (8) Balancing the needs of the human environment by minimizing and avoiding adverse effects to natural resources.

In “Appendix A, Subpart 4: Response to Comments” of the FEIS, the COE responds to the 31 comments on the DEIS that our agency provided by letter on February 22, 2008. The following are our comments and the remaining issues that EPA has identified as continuing concerns:

- The FEIS states that impacts of historic rates of rise in sea level “are implicitly included in the historic shoreline change data used to formulate the shoreline and inlet management plan for North Topsail Beach. The historic rate of rise in sea level applicable to the project area is 1.25 feet per century.” The reference for the COE’s projected 1.25 feet per century rise in sea level should be provided with this comment.
- Council on Environmental Quality (CEQ) regulations (40 CFR 1502.14(a)) require that an EIS is to “rigorously explore and objectively evaluate all reasonable alternatives” for a proposed action. The regulations (40 CFR 1502.14(b)) further require that substantial treatment be made of each alternative considered in detail, including the proposed action. EPA previously commented on the seven (7) alternatives presented in the DEIS including the No Action alternative. Because of the lengthy duration of the activities, it was unclear to our agency whether the COE has latitude in its authorizations or permitting of the project. EPA was concerned that this would become “an all or nothing approval of the project rather than a provision for interim mid-course review at an appropriate juncture.” The FEIS states that it is anticipated that the record of decision (ROD) as determined by the COE “will include result in an appropriate permit including relevant permit conditions.” Please provide a clarification on what the ROD will include.
- EPA previously commented on the Alternative 7 presented in the DEIS, which involves the construction of a terminal groin on the north end of North Topsail. This alternative was apparently eliminated because it is inconsistent with the State’s coastal policies. Our agency commented that the COE should have considered other more innovative structural options that might be found suitable, including temporary subaqueous structures or wave baffles to modify the hydrodynamics and sand movement, or methods to lessen the wave energy at the eroded beach areas. The FEIS states that “hardened structures, including terminal groins, are currently illegal within the State of North Carolina.” The COE should include the relevant citation from the state code.
- EPA previously suggested an investigation of whether remedial action on Onslow Beach would offer a long-term benefit to North Topsail Beach, as Onslow appears to provide better habitat quality than does North Topsail. The data presented in the DEIS indicated substantially greater erosion along Onslow Beach, with a trend towards an increasing rate of beach loss. The FEIS states that the U.S. Marine Corps (USMC), which controls Onslow Beach, “was a participant in the Project Delivery Team process and is fully aware of the potential impacts of the project on Onslow Beach.” During the initial stages of the plan formulation process the plan reportedly included the placement of mitigation beach fill on the southern end of Onslow Beach to counter the predicted impacts, but the USMC “was not in favor of nourishing Onslow Beach as that activity was deemed to potentially have

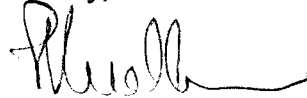
a negative impact on piping plover habitat, namely, an overwash area located on the south end of the island.” Please provide a reference (and include) any communications from the USMC to the COE on this issue.

- The FEIS reports that the identified borrow source lies outside areas preliminary identified by the COE for the federal storm damage reduction project being evaluated for the southern end of North Topsail Beach and the town of Surf City which lies south of North Topsail Beach. Please provide a reference and include all copies of the most recent communication(s) with state and federal resource agencies regarding the selected offshore borrow area, which will reportedly eliminate adverse impacts on the offshore hardbottom resources.
- As mentioned previously, EPA is also currently reviewing the EIS developed for the adjacent project known as the “Draft Integrated Feasibility Report and Environmental Impact Statement for Coastal Storm Damage Reduction for Surf City and North Topsail Beach, North Carolina.” This EIS evaluates coastal storm damage reductions for the Towns of Surf City and North Topsail Beach, NC, and then develops “the most suitable plan of damage reduction for the present and future conditions” for the selected 50-year period of analysis. The primary study area includes the towns of Surf City and North Topsail Beach and the associated nearby borrow sites. It describes a tentatively selected NED Plan that consists of a sand dune system constructed to an elevation of 15 feet above NGVD, fronted by a 50-foot wide beach berm constructed to an elevation of 7 feet above NGVD, with the berm and dune extending along a reach of 52,150 feet in length (about 10 miles). EPA recommends careful coordination to ensure that there are no conflicts between the federal and non-federal projects, either on the shoreline or in the borrow areas. The Draft Integrated Feasibility Report and Environmental Impact Statement states that in the event that the non-federal project is not in place when the federal project begins, then the northern 2,000 feet of the dune and berm system will be replaced with a transition section.
- The FEIS states that “in the absence of maintenance dredging, controlling depths over the outer edge of the ebb tide delta of New River Inlet would likely vary between 2 and 4 feet below MLW depending on antecedent tide and wave conditions.” Please provide a citation or reference with this statement.
- To avoid conflicts, the project should be coordinated with monitoring efforts led by the North Carolina Recreational Water Quality Program (NCRWQ), which regularly tests these coastal waters in order to protect public health by monitoring and notifying the public when bacteriological standards for safe bodily contact are exceeded. Also, the project should be coordinated with the North Carolina Department of Environmental and Natural Resources, Division of Environmental Health, Shellfish Sanitation Section, which is also continually monitoring and classifying these coastal waters as to their suitability for shellfish harvesting for human consumption.
- Finally, CEQ regulations (40 CFR 1502.15) require an EIS to describe the environment of the areas to be affected (or created) by the alternatives under consideration. The data and analysis in the FEIS were found to be commensurate with the significance of the impacts, although EPA still has some general concerns about the potential impacts from dredging on marine threatened and

endangered resources, particularly if plans change and hopper dredges are eventually used. At present all work is tentatively planned to be accomplished using a hydraulic cutterhead dredge.

Thank you for the opportunity to provide comments on this FEIS. EPA rates this FEIS as EC-2, we have some environmental concerns and have requested additional information. If you wish to discuss these comments or have any other questions, please contact me at (404) 562-9611 (mueller.heinz@epa.gov) or Paul Gagliano, P.E., of my staff at (404) 562-9373 (gagliano.paul@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'H. Mueller', with a long horizontal flourish extending to the right.

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management